

W



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,392	12/22/2000	Fei Xie	17402US01	9440

23446 7590 05/26/2006

MCANDREWS HELD & MALLOY, LTD  
500 WEST MADISON STREET  
SUITE 3400  
CHICAGO, IL 60661

EXAMINER

PAN, YUWEN

ART UNIT	PAPER NUMBER
----------	--------------

2618

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/747,392	XIE, FEI	
	Examiner	Art Unit	
	Yuwen Pan	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-7 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 20-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/18/06 has been entered.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-3, and 20-27 have been considered but are moot in view of the new ground(s) of rejection.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1, 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimi-Cohen (US006233320B1) in view of Maeda et al (US005839110A) and Anderson et al (US006453285B1).

Per claim 1, Haimi-Cohen discloses a mobile set having a voice recording means for storing voice conversations received through the mobile set and capable of playback on the

mobile set, the mobile set (see column 1 and lines 7-12) comprising: (a) a uplink/downlink switch for selecting speech frames from either an uplink or a downlink signal, the uplink signal carrying a first speech frame transmitted by the mobile set to a second device during a voice conversation, and the downlink signal carrying a second speech frame received by the mobile set from the second device during the voice conversation (see figure 4 and column 6 and lines 9-34); (b) at least one switching logic controller for switching between the uplink and downlink signals; (c) a method of file header generation for generating headers for recorded speech files (see figure 4 and item 20, column 9 and lines 28-37); (d) a recorder controlling means for configuring and controlling of a recorder operation in one of several modes available to a subscriber (see column 4 and lines 38-60) ; and (e) a memory element storing the selected speech frames into a speech file (see figure 5).

Haimi-chen doesn't teach that the selecting being based on a level of detected voice activity in the speech frames from an uplink and a downlink signal. Maeda teaches that the selecting being based on a level of detected voice activity in the speech frames from an uplink and a downlink signal (see figure 2, column 7 and lines 42-62).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Haimi-Cohen with Maeda's device such that the code data is further compressed and store in the storage means.

Combination of Haimi-Cohen and Maeda don't teach that the selecting being based on an analysis of a received or a transmitted speech frame for a level of data content, wherein each speech frame with a detected level of data content below a threshold level is not selected for recording. Anderson teaches that the selecting being based on an analysis of a received or a

Art Unit: 2618

transmitted speech frame for a level of data content, wherein each speech frame with a detected level of data content below a threshold level is not selected for recording (see column 3 and lines 2-23, figure 1 and 3). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Anderson with the combination of Haimi-Cohen and Maeda such that it would reduce the noise within the speech signals.

Per claim 20, 25, Maeda further discloses a particular speech frame is selected if the level of detected voice activity in the particular speech frame is above a threshold level (see column 8 and lines 30-38).

Per claim 21, 22, 26 and 27, Maeda further discloses a particular speech frame is discarded and not selected upon a detection of no speech data in the particular speech frame and the discard speech frame is replaced with a place holder maker, the place holder maker being stored instead of the discarded speech frame (see column 8 and lines 45- column 9 and line 30).

Per claim 23, Haimi-Cohen further teaches that the selected speech frames are arranged into a single data stream and stored into the speech file (see figure 3).

Per claim 24, Haimi-Cohen has disclosed an analogous art as recited in claim 2. Haimi-Cohen doesn't teach that the selecting being based on a level of detected voice activity in the speech frames from an uplink and a downlink signal. Maeda teaches that the selecting being

based on a level of detected voice activity in the speech frames from an uplink and a downlink signal (see figure 2, column 7 and lines 42-62).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Haimi-Cohen with Madea's device such that the code data is further compressed and store in the storage means.

5. Claims 2, 3 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimi-Cohen (US006233320B1) in view of Anderson et al (US006453285B1).

Per claim 2, Haimi-Cohen teaches a method in a mobile set for storing voice recording, the method comprising: controlling a processor to identify speech containing time frames from at least on uplink and at least one downlink signal, the uplink signal carrying a first speech frame transmitted by the mobile set to a second device during a voice conversation, and the downlink signal carrying a second speech frame received by the mobile set from the second device during the voice conversation (see figure 4, column 4 and lines 38-47); and (b) recording the speech containing time frames from said uplink and said downlink signals, wherein the speech time frames are arranged in to a single data stream and are recorded sequentially with a time stamp for each time frame (see figure 3, 5 and column 6 and lines 17-27).

Haimi-Cohen doesn't teach that the selecting being based on an analysis of a received or a transmitted speech frame for a level of data content, wherein each speech frame with a detected level of data content below a threshold level is not selected for recording. Anderson teaches that the selecting being based on an analysis of a received or a transmitted speech frame for a level of data content, wherein each speech frame with a detected level of data content below a threshold

Art Unit: 2618

level is not selected for recording (see column 3 and lines 2-23, figure 1 and 3). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Anderson with Haimi-Cohen such that it would reduce the noise within the speech signals.

Per claim 3, Haimi-Cohen further teaches the voice detector is a processor having a buffer for storing multiple time frames of uplink and downlink signals, and capable of assigning each time frame a logic value while sorting through signals of the same time frame (see column 8 and lines 52-67).

Per claim 28, Anderson further teaches that each speech frame is timed (see column 3 and lines 13-20).

#### *Allowable Subject Matter*

6. Claims 4-7 are allowed.

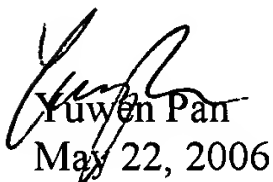
The following is a statement of reasons for the indication of allowable subject matter: prior art of record does teach a method in a mobile set for determining record worthy time frame comprising receiving a first and second signal in the voice activity detector. Prior art of record doesn't teach the step of comparing the two signals, where the first and second signals have the same time stamp, and selecting having a logic value for recording; and substituting the low logic value signal with a placeholder marker for recording.

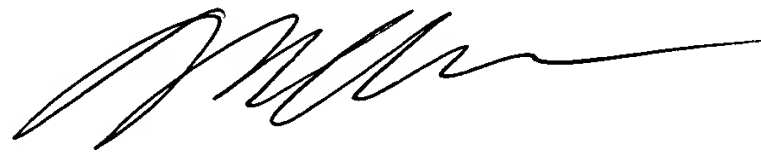
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anderson D. Matthew can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Yuwen Pan  
May 22, 2006

  
**Matthew D. Anderson**  
Supervisory Patent Examiner